

ABSTRACT

The application describes a honing tool for use with a CNC machine. A fluid actuator provides the mechanism for causing radial adjustment of abrasive elements. The actuator consists of a piston and cylinder assembly mounted within the tool and powered by the through the tool cooling fluid of the CNC machine. Actuation motion is driven by a helical drive on the piston which imparts rotary motion to a feed rod. Upper and lower feed rod sections are connected through a clutch. Axial movement is imparted to feed cone by threaded engagement between feed cone and lower feed rod.